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ABSTRACT

This report is a description of the findings related to 5-year graduation rates of student athletes who entered National Collegiate Athletic Association (NCAA) Division I institutions in the fall semester of either 1984 or 1985. The study is based on data collected in the NCAA Study of Academic Performance of Student Athletes. Overall graduations rates are presented for a group of 3,288 student athletes from 85 Division I institutions. Further breakdowns include sex, race, and sport differences. Table 1 presents a breakdown of 5-year graduation rates for 1984 and 1985 student athletes. Table 2 summarizes the college outcomes for student athletes in the sample studied, and tables 3,4, and 5 show breakdowns of the graduation rates at specific levels of a high school academic predictor variable. The results from the study show the differences among various subgroups of student athletes in their academic preparation and performance. Findings indicate that females, in general, are better prepared and fare better than their male counterparts. The same is revealed for whites when compared with blacks; however, it is also shown that blacks, in general, performed slightly better than whites at the same level of preparation. (GLR)

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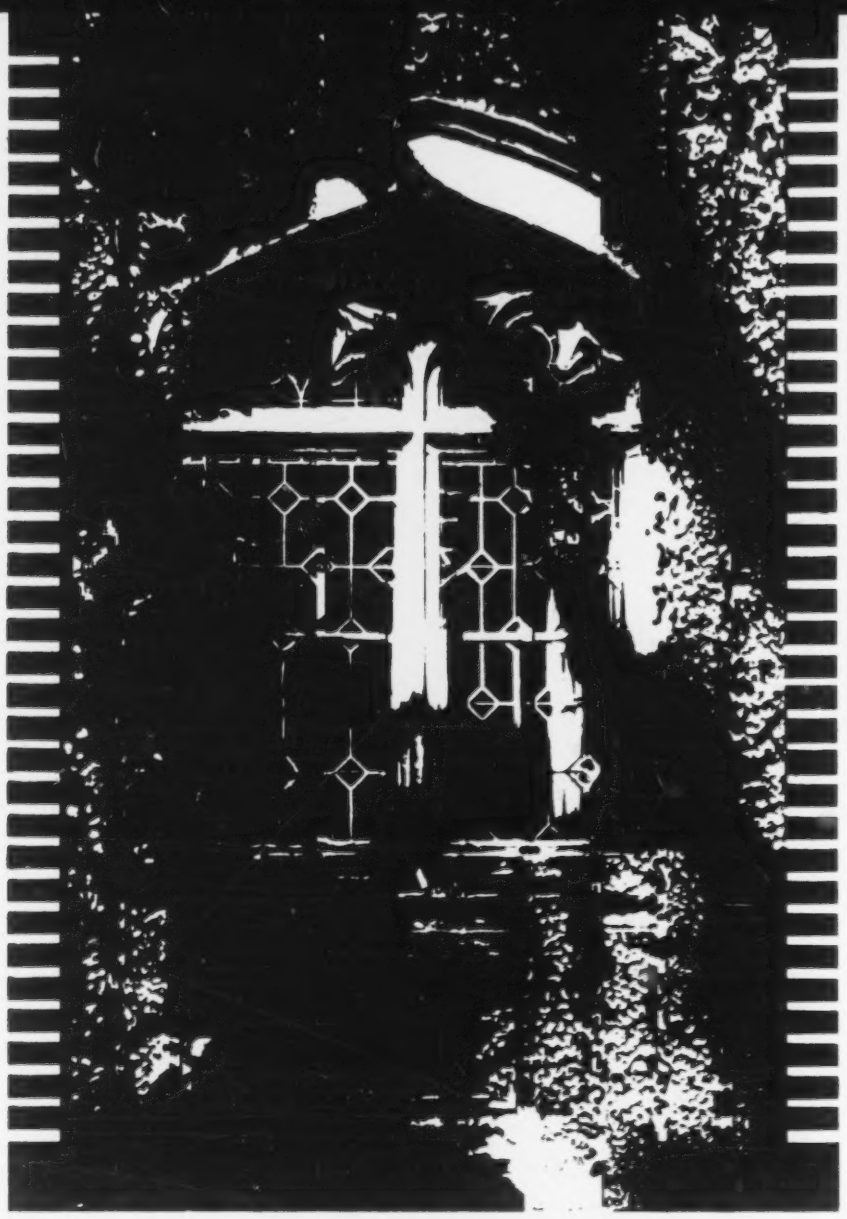

NCAA Academic Performance Study

Report 91-01

A Description of College Graduation Rates for 1984 and 1985 Freshman Student-Athletes

HE 024 790

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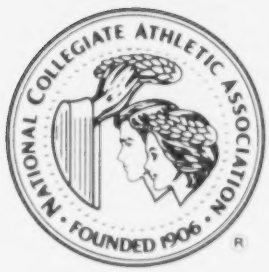
FOREWORD

This report is the second in a series that we shall be publishing to inform our member institutions and others about our ongoing study of student-athletes' academic performance under Bylaw 14.3.

The results presented here are preliminary. This study was begun in 1985 and still has several years before completion.

We welcome your comments and suggestions on this report.

RICHARD D. SCHULTZ
NCAA Executive Director
June 1991



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INTRODUCTION

This report is a description of the findings related to five year graduation rates of student athletes who entered NCAA Division I institutions in the fall semester of either 1984 or 1985. The study is based on data collected in the NCAA Study of Academic Performance of Student Athletes (APS). (For a general overview of this study, please see NCAA Academic Performance Study Report 90-01.) The 1984 and 1985 cohorts were pooled in an effort to provide a better picture of the entirety of Division I than could be achieved by using a single cohort. It was thought that these two groups could be combined successfully because: (1) the institutions were assigned randomly in a fashion that was designed to reflect the whole of Division I, and (2) neither of these cohorts was affected by Bylaw 14.3, which was implemented in 1986. After combining these data, analyses were conducted in an effort to establish the existence of any problematic statistical differences between the two cohorts. No such differences were discovered. (Additional information pertaining to the presence of cohort effects will be presented in Report 91-4). Overall graduation rates are presented for a group of 3,288 student athletes from 85 Division I institutions. Further breakdowns include sex, race and sport differences.

METHODS

The general methodology for this study is contained in Report 90-01. However, there are some points that need to be made specifically for this report. The first is that this sample includes only those student athletes in the 1984 and 1985 cohorts for whom we have data for their entire career at an institution, whether that career was one or five years in length. Also, we have included only those student athletes who were reported as being either black or white, and only those who were reported to be United States citizens. The number of student athletes included in this total sample is 3,288.

The graduation rates for the following tables were calculated by dividing the number of graduates after five years by the number of student athletes who had entered that institution as freshmen in the initial year of the survey. The adjusted graduation rate was calculated by removing all student athletes who left their institutions in good academic standing from the group of initially entered freshmen.

RESULTS

Table 1 presents a breakdown of five year graduation rates for 1984 and 1985 student athletes. The table gives overall graduation rates figures for the entire group, and also breaks those figures down by race, sex, sport, and a combination of those three variables. In these data, 45.7 percent of all incoming freshman student athletes graduated from the schools at which they matriculated as freshmen. These findings are consistent with similar studies (see Report 90-11). It is clear from this table that many differences can be found among those groups, among which are divisions with regard to race. For example, Whites graduated at slightly less than double the rate of Blacks (52.3 percent to 26.6 percent). Also, women graduated at a significantly higher rate than men (53.9 percent to 42.3 percent). In terms of the breakdown by sport, participants in the male revenue sports showed the lowest rate of graduation by the fifth year. However, this trend did not hold when the sport categories were divided further by race. For white males, those in revenue sports showed a higher graduation rate than those in nonrevenue sports. The same was true for the black males. Within both racial categories, females showed higher graduation figures than their male counterparts.

Table 2 summarizes the college outcomes for student athletes in this sample. This table identifies four possible outcomes: (1) graduating, (2) leaving the institution in good academic standing, (3) leaving the institution while not in good academic standing and (4) continuing studies at the institution. The table reports on the overall group, and then the findings are broken down by race. The groups are further broken down by the reporting years of the study. Overall, the largest percentage of student-athletes fell into the "graduation" category, with "leaving in good standing" the second highest category. That same pattern held for the white student athletes, but not for black. In the black population, "leaving while not in good standing" was the highest single category, followed by "leaving in good standing," followed by "graduating." Another difference between the races is the point at which they left the institution. White student athletes who left tended to do so in the first two years of schooling, while Blacks who left were more evenly spread across the entire five year period. In these data, 28.2 percent of all black student athletes left the institution in the fourth or fifth year, and nearly half of those (13.8 percent) were in good academic standing when they left. That is contrasted with the finding that 26.7 percent of all Whites who entered an institution left in the first two years. The causes of these differences are unknown, but the findings provide the basis for further study.

Tables 3, 4 and 5 show a breakdown of the graduation rates at specific levels of a high school academic predictor variable. Tables 3, 3A and 3B give these rates as a function of high school core grade point average (CGPA). Tables 4, 4A and 4B show the rates as a function of precollege test score (either SAT or ACT). Tables 5, 5A and 5B show the graduation rates as a function of an equally weighted average of the previously mentioned indicators. The first two columns in these tables give the raw and standardized scores, respectively. In the remainder of the tables, the "% all" columns provide the percentage of the entire sample that was at or below a given level on the variable, and the "% grad" columns give the percentage of the sample that graduated with scores at or below a given level. The columns under the "cumulative" heading provide the accumulated percentages

for each category. The numbers under the "within cell" heading provide the same data broken down for each category within the table. [Note: All of the tables use the z score unit as the unit of reference. Z scores are scores that are based on distance from the mean. The mean is set at a z score of 0.0. Thus, a z score of –1.0 is one standard deviation below the mean, whereas a z score of +2.5 is two and a half standard deviation units above the mean.]

Tables 3, 4 and 5 provide the data for the entire sample. Thus, one can see in Table 3 that 61.0 percent of the total sample of student athletes was at or below the mean core grade point average. However, only 19.9 percent of the sample consisted of graduates who were at or below the mean (z score = 0.0) on the core grade point average.

Tables 3A, 4A and 5A provide differences between Blacks and Whites as a percentage of the overall group (N=3,288). Table 3A shows that black student athletes represented 25.4 percent of the total sample. Also, black student athletes at or below the mean CGPA score represented 21.9 percent of the total.

Tables 3B, 4B and 5B provide information similar to that described above, except the percentages listed are based on the sample size within each racial group. From Table 3B, one can see that 52.4 percent of all white student athletes in the study fell at or below the mean CGPA score, while 86.1 percent of all black student athletes fell at or below the mean CGPA score.

The tables described in the preceding paragraphs are useful in that they give a picture of the distribution of scores on potentially important predictor variables within this population. These data illustrate that the distribution of Blacks was generally lower on these scores than that of Whites. This is most clearly illustrated in Table 4B. That table shows that 40.5 percent of the Whites fell at or below the mean TEST score. The corresponding number for the Blacks is 88.9 percent. However, another point to be made from this table is that Blacks graduated from the lower levels of the ability scores at a higher rate than Whites. For example, at the –1.00 z score level (approximately 700 on the SAT and 15 on the ACT) only 2.5 percent of Whites graduate, compared to 10.8 percent of Blacks. Thus, within the racial group analysis, while black student athletes tended toward the lower end of the distribution, they also graduated at a higher rate than white student athletes coming from the lower end.

Four figures serve as graphic representations of the data in Table 5, 5A and 5B. Figure 1 shows the cumulative distribution of the entire sample and of the graduates. Figure 2 is a within cell (i.e., noncumulative) representation of the same data. This figure provides a picture of the whole distribution, and the frequencies at any given point. The distribution of the graduates was shifted slightly to the right, indicating that the graduates were more likely to come from the higher end of the overall distribution. Figure 3 further separates the distribution of the two races. These pictures clearly illustrate the fact that the black population was shifted to the left, or lower end of the distribution. One can also see that black graduates were more likely to come from the lower end than their white counterparts. Finally, Figure 4 illustrates the two distributions as a function of the within group percentages. In this figure, one can again see the difference in the mode or central tendency of the distribution. For Whites, the overall peak was near zero, and the peak for graduates was near the 1.00 z score level (one standard deviation above the mean). For Blacks, both the overall distribution and the distribution of graduates peaked at around the –1.00 z score level (one standard deviation below the mean).

SUMMARY

The results of these analyses show the differences among various subgroups of student athletes in their academic preparation and performance. Females, in general, were better prepared and fared better than their male counterparts. The same can be said for Whites when compared with Blacks. However, while Blacks, in general, entered school less well prepared, they performed slightly better than Whites at the same level of preparation. If nothing else, these results illustrate the complexity of the issues that are involved in attempting to define minimums for academic success in college.

TABLE 1

FIVE-YEAR GRADUATION RATES FOR 1984-85 STUDENT-ATHLETES BY GROUP

Group	Total Persons		Number Graduated	Overall Graduation Rate (N=3288)	Adjusted Graduation Rate (N=2198)*
	N	%			
OVERALL	3288	100.0%	1504	45.7%	68.4%
RACIAL GROUP					
Whites	2453	74.6%	1282	52.3%	77.0%
Blacks	835	25.4%	222	26.6%	41.6%
SEX					
Males	2314	70.4%	979	42.3%	63.7%
Females	974	29.6%	525	53.9%	79.4%
SPORT					
Male Revenue	1314	40.0%	553	42.1%	62.5%
Male Nonrevenue	1018	31.0%	436	42.8%	65.2%
Female All	956	29.1%	515	53.9%	79.5%
SEPARATE GROUPS					
White Male Revenue	751	22.8%	412	54.9%	78.5%
White Male Nonrevenue	895	27.2%	407	45.5%	69.3%
White Female All	807	24.5%	463	57.4%	83.9%
Black Male Revenue	563	17.1%	141	25.0%	39.5%
Black Male Nonrevenue	123	3.7%	29	23.6%	35.8%
Black Female All	149	4.5%	52	34.9%	54.2%

Notes: All percentages based on sample size listed.

* N for adjusted graduation rate is based on total sample minus eligible dropouts.

TABLE 2

A SUMMARY OF PATTERNS OF COLLEGE OUTCOMES FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES

	All Student Athletes		White Student Athletes		Black Student Athletes	
	Column %	(N)	Column %	(N)	Column %	(N)
1. Graduated Student Athletes	45.7%	(1,504)	52.2%	(1,282)	26.6%	(222)
Graduated 4th Year	25.3%	(833)	30.8%	(756)	9.2%	(77)
Graduated 5th Year	20.4%	(671)	21.4%	(526)	17.4%	(145)
2. Leave in Good Standing	29.0%	(931)	28.2%	(693)	30.9%	(258)
Left 1st Year	7.1%	(232)	7.9%	(193)	4.7%	(39)
Left 2nd Year	10.1%	(332)	10.8%	(266)	7.9%	(66)
Left 3rd Year	4.3%	(140)	4.2%	(104)	4.3%	(36)
Left 4th Year	3.5%	(116)	2.6%	(64)	6.2%	(52)
Left 5th Year	3.8%	(126)	2.6%	(63)	7.6%	(63)
3. Leave Not in Good Standing	25.3%	(833)	19.6%	(478)	42.5%	(355)
Left 1st Year	5.3%	(174)	4.2%	(102)	8.6%	(72)
Left 2nd Year	4.8%	(159)	3.8%	(92)	8.0%	(67)
Left 3rd Year	3.2%	(106)	2.2%	(53)	6.3%	(53)
Left 4th Year	5.7%	(188)	4.7%	(116)	8.6%	(72)
Left 5th Year	2.1%	(67)	.8%	(19)	5.8%	(48)
4. Continuing Students	4.4%	(144)	4.0%	(99)	5.4%	(45)
Totals	100.0%	(3,288)	100.0%	(2,453)	100.0%	(835)

Note: The overall graduation rate has previously been defined as a comparison of Category 1 above to Categories 2, 3, and 4. The adjusted graduation rate has been defined as a comparison of Category 1 above to Category 3 above.

TABLE 3

GRADUATION RATES FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF HIGH-SCHOOL CORE GRADE-POINT AVERAGE (CGPA)

Raw Score CGPA	Z Score Equivalent	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad
1.50	-3.00	0.7	0.2	0.7	0.2
	-2.75	1.5	0.2	0.8	0.1
	-2.50	2.3	0.3	0.8	0.1
	-2.25	4.1	0.7	1.8	0.4
2.00	-2.00	7.7	1.3	3.6	0.6
	-1.75	15.2	2.9	7.5	1.6
	-1.50	21.1	4.3	6.0	1.4
	-1.25	27.8	6.0	6.7	1.8
2.50	-1.00	34.3	8.3	6.5	2.3
	-0.75	40.6	10.5	6.3	2.2
	-0.50	46.8	13.2	6.1	2.7
	-0.25	52.4	15.3	5.6	2.1
3.00	0.00	61.0	19.9	8.6	4.7
	0.25	66.2	22.7	5.3	2.8
	0.50	73.7	27.5	7.4	4.7
	0.75	79.2	30.9	5.5	3.4
3.50	1.00	84.1	34.1	4.9	3.3
	1.25	87.1	36.1	3.1	2.0
	1.50	91.2	38.8	4.1	2.8
	1.75	95.2	41.8	4.0	3.0
4.00	2.00	100.0	45.7	4.8	3.9

Note: '% All' denotes cumulative frequency up to the designated CGPA category divided by the total sample size (N=3288); '% Grad' denotes cumulative graduation rate up to the designated CGPA category divided by the total sample size (N=3288).

TABLE 3a

GRADUATION RATE AS PERCENT OF OVERALL GROUP (N=3288) FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF HIGH-SCHOOL CORE GRADE-POINT AVERAGE (CGPA) BY RACIAL GROUP

		Whites (N=2453)				Blacks (N=835)			
Raw Score CGPA	Z Score Equivalent	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad
1.50	-3.00	0.1	0.1	0.1	0.1	0.6	0.1	0.6	0.1
	-2.75	0.5	0.2	0.3	0.1	1.1	0.1	0.5	0.0
	-2.50	0.8	0.2	0.3	0.0	1.5	0.1	0.4	0.0
	-2.25	1.7	0.4	0.9	0.2	2.4	0.3	0.9	0.2
2.00	-2.00	3.2	0.8	1.5	0.4	4.5	0.5	2.1	0.2
	-1.75	7.2	2.0	4.0	1.2	8.0	1.0	3.5	0.5
	-1.50	10.4	2.8	3.3	0.8	10.7	1.5	2.7	0.6
	-1.25	14.3	3.8	3.8	1.0	13.5	2.3	2.8	0.7
2.50	-1.00	18.6	5.5	4.4	1.7	15.7	2.8	2.2	0.6
	-0.75	22.9	7.3	4.3	1.8	17.7	3.2	2.0	0.4
	-0.50	27.8	9.5	4.9	2.2	19.0	3.7	1.3	0.5
	-0.25	32.2	11.2	4.4	1.7	20.2	4.1	1.2	0.4
3.00	0.00	39.1	15.1	6.8	3.9	21.9	4.8	1.7	0.7
	0.25	43.6	17.6	4.6	2.5	22.6	5.1	0.7	0.3
	0.50	50.1	21.9	6.5	4.3	23.5	5.6	0.9	0.5
	0.75	54.9	24.9	4.8	3.0	24.3	6.0	0.7	0.4
3.50	1.00	59.3	27.8	4.4	3.0	24.7	6.3	0.5	0.3
	1.25	62.2	29.7	2.9	1.9	24.9	6.4	0.2	0.1
	1.50	66.0	32.3	3.8	2.6	25.2	6.5	0.3	0.2
	1.75	69.9	35.2	4.0	2.9	25.2	6.6	0.1	0.1
4.00	2.00	74.6	39.0	4.6	3.8	25.4	6.8	0.2	0.2

Note: '% All' denotes cumulative frequency up to the designated CGPA category divided by the total sample size (N=3288); '% Grad' denotes cumulative graduation rate up to the designated CGPA category divided by the total sample size (N=3288).

TABLE 3b

GRADUATION RATE WITHIN TWO RACIAL GROUPS FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF HIGH-SCHOOL CORE GRADE-POINT AVERAGE (CGPA) BY RACIAL GROUP

		Whites (N=2453)				Blacks (N=835)			
Raw Score CGPA	Z Score Equivalent	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad
1.50	-3.00	0.2	0.1	0.2	0.1	2.4	0.2	2.4	0.2
	-2.75	0.6	0.2	0.5	0.1	4.2	0.4	1.8	0.1
	-2.50	1.1	0.2	0.5	0.0	5.9	0.5	1.7	0.1
	-2.25	2.3	0.5	1.3	0.3	9.4	1.1	3.5	0.6
2.00	-2.00	4.4	1.1	2.0	0.5	17.5	1.9	8.1	0.8
	-1.75	9.7	2.6	5.3	1.6	31.4	3.8	13.9	1.9
	-1.50	14.0	3.7	4.4	1.1	42.0	6.0	10.7	2.2
	-1.25	19.2	5.1	5.1	1.4	53.2	8.9	11.1	2.9
2.50	-1.00	25.0	7.3	5.8	2.2	61.7	11.1	8.5	2.3
	-0.75	30.7	9.8	5.8	2.5	69.7	12.6	8.0	1.4
	-0.50	37.3	12.8	6.6	3.0	74.6	14.5	4.9	1.9
	-0.25	43.2	15.0	5.9	2.2	79.3	16.1	4.7	1.6
3.00	0.00	52.4	20.3	9.2	5.3	86.1	18.9	6.8	2.9
	0.25	58.5	23.7	6.1	3.4	89.0	20.1	2.9	1.2
	0.50	67.2	29.4	8.7	5.7	92.6	21.9	3.6	1.8
	0.75	73.6	33.4	6.4	4.0	95.4	23.6	2.9	1.7
3.50	1.00	79.6	37.4	6.0	4.0	97.2	24.7	1.8	1.1
	1.25	83.5	39.9	3.9	2.5	98.0	25.0	0.7	0.4
	1.50	88.5	43.3	5.1	3.5	99.0	25.8	1.1	0.7
	1.75	93.8	47.2	5.3	3.9	99.3	26.0	0.2	0.2
4.00	2.00	100.0	52.3	6.2	5.1	100.0	26.6	0.7	0.6

Note: '% All' denotes cumulative frequency up to the designated CGPA category divided by the total sample size within each racial group; '% Grad' denotes cumulative graduation rate up to the designated CGPA category divided by the total sample size within each racial group.

TABLE 4

CUMULATIVE GRADUATION RATE FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF TEST GROUP

Raw SAT Score	Raw ACT Score	Z Score Equivalent	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad
270	3.2	-3.00	0.1	0.0	0.1	0.0
		-2.75	0.2	0.0	0.1	0.0
		-2.50	0.6	0.0	0.4	0.0
		-2.25	2.1	0.1	1.5	0.1
480	9.0	-2.00	3.8	0.3	1.8	0.2
		-1.75	8.9	1.2	5.1	0.9
		-1.50	13.0	1.9	4.1	0.7
		-1.25	17.3	2.6	4.3	0.8
690	14.8	-1.00	24.2	4.6	7.0	2.0
		-0.75	30.4	6.2	6.1	1.6
		-0.50	39.0	9.8	8.6	3.6
		-0.25	45.3	12.4	6.3	2.6
900	19.2	0.00	52.8	15.6	7.5	3.2
		0.25	62.7	20.6	10.0	5.1
		0.50	69.7	23.8	7.0	3.2
		0.75	78.0	28.7	8.2	4.9
1100	25.0	1.00	84.7	33.4	6.7	4.7
		1.25	89.9	37.4	5.2	4.1
		1.50	94.2	40.8	4.3	3.4
		1.75	96.6	42.9	2.5	2.1
1320	30.8	2.00	98.5	44.4	1.8	1.5
		2.25	99.2	45.0	0.7	0.6
		2.50	99.8	45.5	0.6	0.5
		2.75	100.0	45.7	0.2	0.2
1530	36.0	3.00	100.0	45.7	0.0	0.0

Note: '% All' denotes cumulative frequency up to the designated TEST category divided by the total sample size (N=3288); '% Grad' denotes cumulative graduation rate up to the designated TEST category divided by the total sample size (N=3288).

TABLE 4a

GRADUATION RATE AS PERCENT OF OVERALL GROUP (N=3288) FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF STANDARDIZED TEST SCORE (TEST) BY RACIAL GROUP

			Whites (N=2453)				Blacks (N=835)			
Raw SAT Score	Raw ACT Score	Z Score Equivalent	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad
270	3.2	-3.00	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
		-2.75	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0
		-2.50	0.0	0.0	0.0	0.0	0.6	0.0	0.4	0.0
		-2.25	0.1	0.0	0.1	0.0	2.0	0.1	1.4	0.1
480	9.0	-2.00	0.3	0.0	0.2	0.0	3.5	0.2	1.5	0.2
		-1.75	1.4	0.3	1.1	0.2	7.5	0.9	4.0	0.7
		-1.50	2.6	0.5	1.2	0.2	10.4	1.4	2.9	0.5
		-1.25	4.3	0.8	1.7	0.3	13.0	1.9	2.6	0.5
690	14.8	-1.00	8.4	1.9	4.1	1.1	15.9	2.7	2.9	0.9
		-0.75	12.2	2.7	3.8	0.9	18.2	3.4	2.3	0.7
		-0.50	18.7	5.5	6.5	2.7	20.3	4.3	2.1	0.9
		-0.25	23.9	7.6	5.2	2.1	21.4	4.8	1.1	0.5
900	19.2	0.00	30.2	10.3	6.4	2.7	22.6	5.2	1.2	0.5
		0.25	39.1	15.0	8.9	4.7	23.6	5.7	1.1	0.4
		0.50	45.5	17.9	6.4	3.0	24.3	5.9	0.6	0.2
		0.75	53.3	22.5	7.8	4.6	24.7	6.2	0.5	0.3
1100	25.0	1.00	59.6	26.9	6.4	4.4	25.1	6.5	0.3	0.3
		1.25	64.7	30.8	5.1	3.9	25.2	6.6	0.2	0.2
		1.50	68.9	34.2	4.3	3.3	25.2	6.6	0.0	0.0
		1.75	71.3	36.1	2.4	2.0	25.3	6.7	0.1	0.1
1320	30.8	2.00	73.1	37.6	1.8	1.5	25.4	6.8	0.1	0.0
		2.25	73.8	38.3	0.7	0.6	25.4	6.8	0.0	0.0
		2.50	74.4	38.8	0.6	0.5	25.4	6.8	0.0	0.0
		2.75	74.6	39.0	0.2	0.2	25.4	6.8	0.0	0.0
1530	36.0	3.00	74.6	39.0	0.0	0.0	25.4	6.8	0.0	0.0

Note: '% All' denotes cumulative frequency up to the designated TEST category divided by the total sample size (N=3288); '% Grad' denotes cumulative graduation rate up to the designated CGPA category divided by the total sample size (N=3288).

TABLE 4b

GRADUATION RATE WITHIN TWO RACIAL GROUPS FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF STANDARDIZED TEST SCORE (TEST) BY RACIAL GROUP

			Whites (N=2453)				Blacks (N=835)			
Raw SAT Score	Raw ACT Score	Z Score Equivalent	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad
270	3.2	-3.00	0.0	0.0	0.0	0.0	0.4	0.1	0.4	0.1
		-2.75	0.0	0.0	0.0	0.0	0.7	0.1	0.4	0.0
		-2.50	0.0	0.0	0.0	0.0	2.3	0.1	1.6	0.0
		-2.25	0.1	0.0	0.1	0.0	7.8	0.4	5.5	0.2
480	9.0	-2.00	0.5	0.0	0.3	0.0	13.8	1.0	6.0	0.6
		-1.75	1.9	0.4	1.5	0.3	29.5	3.6	15.7	2.6
		-1.50	3.5	0.7	1.6	0.3	40.8	5.5	11.4	1.9
		-1.25	5.8	1.0	2.3	0.4	51.0	7.4	10.2	1.9
690	14.8	-1.00	11.2	2.5	5.4	1.5	62.5	10.8	11.5	3.4
		-0.75	16.4	3.7	5.1	1.1	71.6	13.5	9.1	2.8
		-0.50	25.1	7.4	8.7	3.7	80.0	16.9	8.4	3.4
		-0.25	32.0	10.2	6.9	2.9	84.3	18.8	4.3	1.9
900	19.2	0.00	40.5	13.8	8.5	3.6	88.9	20.6	4.6	1.8
		0.25	52.4	20.0	11.9	6.2	93.1	22.3	4.2	1.7
		0.50	61.0	24.0	8.5	4.0	95.6	23.2	2.5	1.0
		0.75	71.4	30.2	10.4	6.2	97.4	24.3	1.8	1.1
1100	25.0	1.00	79.9	36.1	8.5	5.9	98.7	25.4	1.3	1.1
		1.25	86.7	41.4	6.8	5.2	99.3	26.0	0.6	0.6
		1.50	92.4	45.8	5.7	4.4	99.4	26.1	0.1	0.1
		1.75	95.6	48.4	3.2	2.7	99.8	26.5	0.4	0.4
1320	30.8	2.00	97.9	50.4	2.4	2.0	100.0	26.6	0.2	0.1
		2.25	98.9	51.3	0.9	0.9	100.0	26.6	0.0	0.0
		2.50	99.7	52.0	0.6	0.7	100.0	26.6	0.0	0.0
		2.75	100.0	52.2	0.2	0.2	100.0	26.6	0.0	0.0
1530	36.0	3.00	100.0	52.3	0.0	0.0	100.0	26.6	0.0	0.0

Note: '% All' denotes cumulative frequency up to the designated TEST category divided by the total sample size within each racial group; '% Grad' denotes cumulative graduation rate up to the designated TEST category divided by the total sample size within each racial group.

TABLE 5

CUMULATIVE GRADUATION RATE FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF THE AVERAGE Z-SCORE OF CGPA AND TEST BY GROUP

Z Score Average	Cumulative % All	Cumulative % Grad	Within Cell % All	Within Cell % Grad
3.00	0.0	0.0	0.0	0.0
2.75	0.1	0.0	0.1	0.0
2.50	0.5	0.1	0.4	0.0
2.25	1.6	0.1	1.0	0.0
2.00	3.9	0.2	2.3	0.1
1.75	7.5	0.8	3.6	0.6
1.50	13.3	2.0	5.8	1.3
1.25	20.3	3.5	7.0	1.4
1.00	27.5	5.2	7.2	1.8
0.75	35.1	7.7	7.6	2.5
0.50	42.5	10.5	7.4	2.8
0.25	50.9	13.9	8.5	3.4
0.00	59.1	18.0	8.2	4.1
0.25	66.5	21.8	7.4	3.8
0.50	73.7	26.2	7.2	4.4
0.75	79.6	30.0	6.0	3.8
1.00	86.0	34.4	6.4	4.4
1.25	90.9	38.1	4.9	3.7
1.50	95.6	41.9	4.7	3.8
1.75	98.3	44.2	2.7	2.3
2.00	99.5	45.3	1.2	1.1
2.25	99.9	45.7	0.4	0.4
2.50	100.0	45.7	0.1	0.1
2.75	100.0	45.7	0.0	0.0

Note: '% All' denotes frequency up to the designated AVERAGE category divided by the total sample size (N=3288); '% Grad' denotes cumulative graduation rate up to the designated AVERAGE category divided by the total sample size (N=3288).

TABLE 5a

GRADUATION RATE AS PERCENT OF OVERALL GROUP (N=3288) FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF THE AVERAGE Z-SCORE OF CGPA AND TEST BY RACIAL GROUP

	Whites (N=2453)				Blacks (N=835)			
Z Score	Cumulative		Within Cell		Cumulative		Within Cell	
Average	% All	% Grad	% All	% Grad	% All	% Grad	% All	% Grad
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.75	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
2.50	0.1	0.0	0.1	0.0	0.5	0.0	0.4	0.0
2.25	0.1	0.0	0.0	0.0	1.5	0.1	1.0	0.0
2.00	0.5	0.1	0.4	0.0	3.3	0.2	1.9	0.1
1.75	1.7	0.3	1.2	0.2	5.8	0.5	2.5	0.3
1.50	3.8	0.8	2.1	0.5	9.5	1.2	3.7	0.8
1.25	7.0	1.5	3.2	0.7	13.3	2.0	3.8	0.7
1.00	11.3	2.5	4.4	1.0	16.2	2.7	2.9	0.7
0.75	16.4	4.3	5.1	1.8	18.7	3.4	2.5	0.7
0.50	22.2	6.6	5.8	2.3	20.3	3.9	1.6	0.5
0.25	29.2	9.4	7.1	2.8	21.7	4.5	1.4	0.6
0.00	36.0	12.8	6.8	3.4	23.1	5.2	1.4	0.7
0.25	42.6	16.2	6.6	3.3	23.9	5.7	0.8	0.5
0.50	49.2	20.1	6.6	4.0	24.4	6.0	0.6	0.4
0.75	54.9	23.8	5.7	3.7	24.7	6.2	0.2	0.2
1.00	61.1	28.0	6.1	4.2	24.9	6.4	0.2	0.2
1.25	65.7	31.4	4.6	3.4	25.2	6.6	0.3	0.2
1.50	70.3	35.2	4.6	3.7	25.3	6.7	0.1	0.1
1.75	72.9	37.4	2.7	2.3	25.4	6.8	0.1	0.0
2.00	74.2	38.6	1.2	1.1	25.4	6.8	0.0	0.0
2.25	74.6	38.9	0.4	0.4	25.4	6.8	0.0	0.0
2.50	74.6	39.0	0.1	0.1	25.4	6.8	0.0	0.0

Note: '% All' denotes cumulative frequency up to the designated AVERAGE category divided by the total sample size (N=3288); '% Grad' denotes cumulative graduation rate up to the designated average category divided by the total sample size (N=3288).

TABLE 5b

GRADUATION RATE WITHIN TWO RACIAL GROUPS FOR 1984 AND 1985 ENTERING STUDENT-ATHLETES AS A FUNCTION OF THE AVERAGE Z-SCORE OF CGPA AND TEST BY RACIAL GROUP

	Whites (N=2453)				Blacks (N=835)			
Z Score	Cumulative		Within Cell		Cumulative		Within Cell	
Average	% All	% Grad	% All	% Grad	% All	% Grad	% All	% Grad
-3.00	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
-2.75	0.0	0.0	0.0	0.0	0.4	0.1	0.2	0.1
-2.50	0.1	0.0	0.1	0.0	1.8	0.1	1.4	0.0
-2.25	0.1	0.0	0.0	0.0	5.8	0.2	4.0	0.1
-2.00	0.7	0.1	0.6	0.0	13.2	0.6	7.4	0.4
-1.75	2.2	0.4	1.6	0.3	22.9	1.8	9.7	1.2
-1.50	5.1	1.1	2.9	0.7	37.5	4.9	14.6	3.1
-1.25	9.3	2.0	4.2	0.9	52.5	7.8	15.0	2.9
-1.00	15.2	3.4	5.8	1.4	63.7	10.7	11.3	2.9
-0.75	22.0	5.8	6.8	2.4	73.5	13.3	9.8	2.6
-0.50	29.7	8.9	7.7	3.1	80.0	15.3	6.5	2.0
-0.25	39.1	12.7	9.5	3.8	85.5	17.6	5.5	2.3
0.00	48.3	17.2	9.1	4.6	90.9	20.5	5.4	2.9
0.25	57.1	21.7	8.8	4.4	94.0	22.3	3.1	1.8
0.50	66.0	27.0	8.9	5.3	96.3	23.7	2.3	1.4
0.75	73.6	31.9	7.7	4.9	97.3	24.3	1.0	0.6
1.00	81.9	37.5	8.2	5.6	98.2	25.3	1.0	1.0
1.25	88.1	42.1	6.2	4.6	99.4	26.1	1.2	0.8
1.50	94.2	47.1	6.1	5.0	99.8	26.5	0.4	0.4
1.75	97.8	50.2	3.6	3.1	100.0	26.6	0.2	0.1
2.00	99.4	51.7	1.6	1.5	100.0	26.6	0.0	0.0
2.25	99.9	52.2	0.5	0.5	100.0	26.6	0.0	0.0
2.50	100.0	52.3	0.1	0.1	100.0	26.6	0.0	0.0

Note: '% All' denotes cumulative frequency up to the designated AVERAGE category divided by the total sample size within each racial group; '% Grad' denotes cumulative graduation rate up to the designated AVERAGE category divided by the total sample size within each racial group.

FIGURE 1

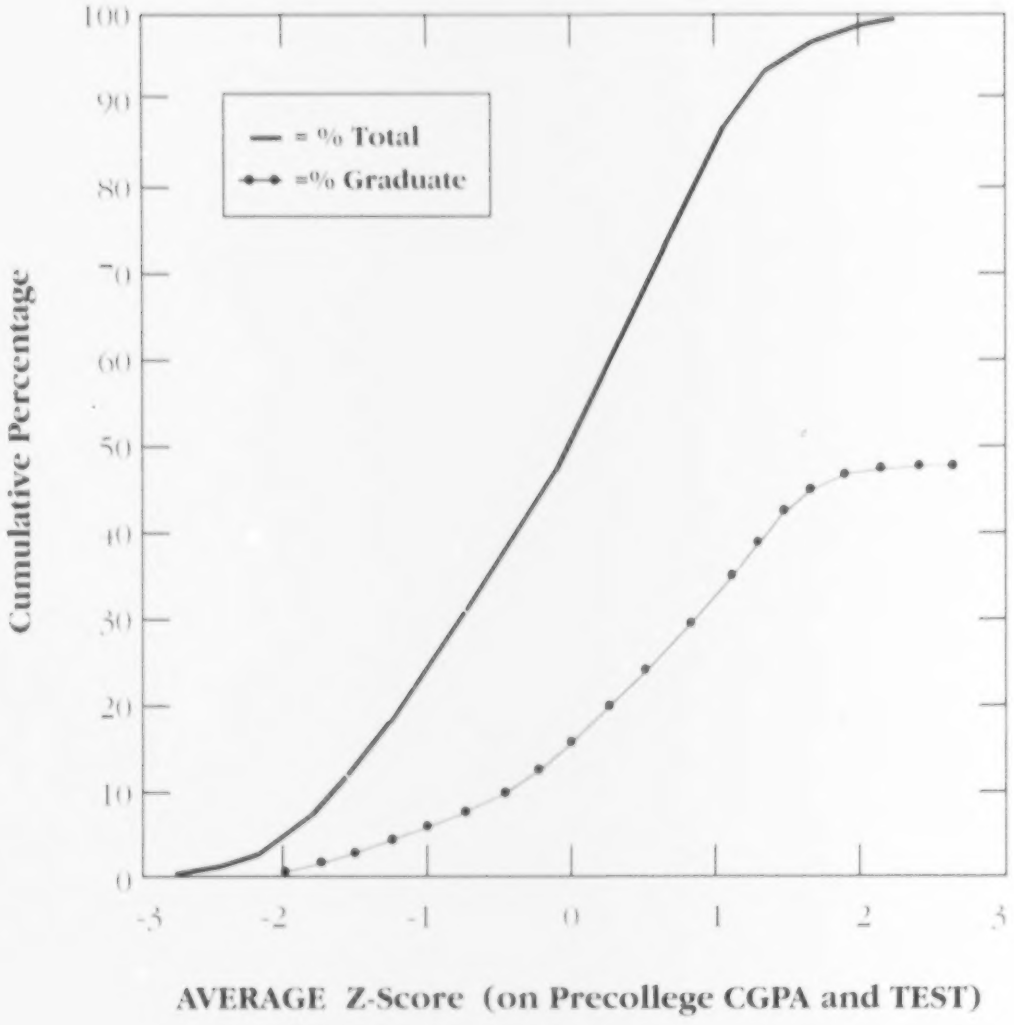


Figure 1: Cumulative graduation rate as a function of average z score for 1984-1985 entering student athletes.

Notes: (1) These numerical values are identical to those listed in Table 5. (2) Average z is formed as a simple average of two precollege variables—the CGPA z-score and the TEST z-score (either SAT or ACT in a z-score form). (3) Percent total is the percentage at or below the current z value based on N=3,288 enrolled student athletes. Percent graduate is a percentage at or below the current z value based on N=1,504 graduated student-athletes.

FIGURE 2

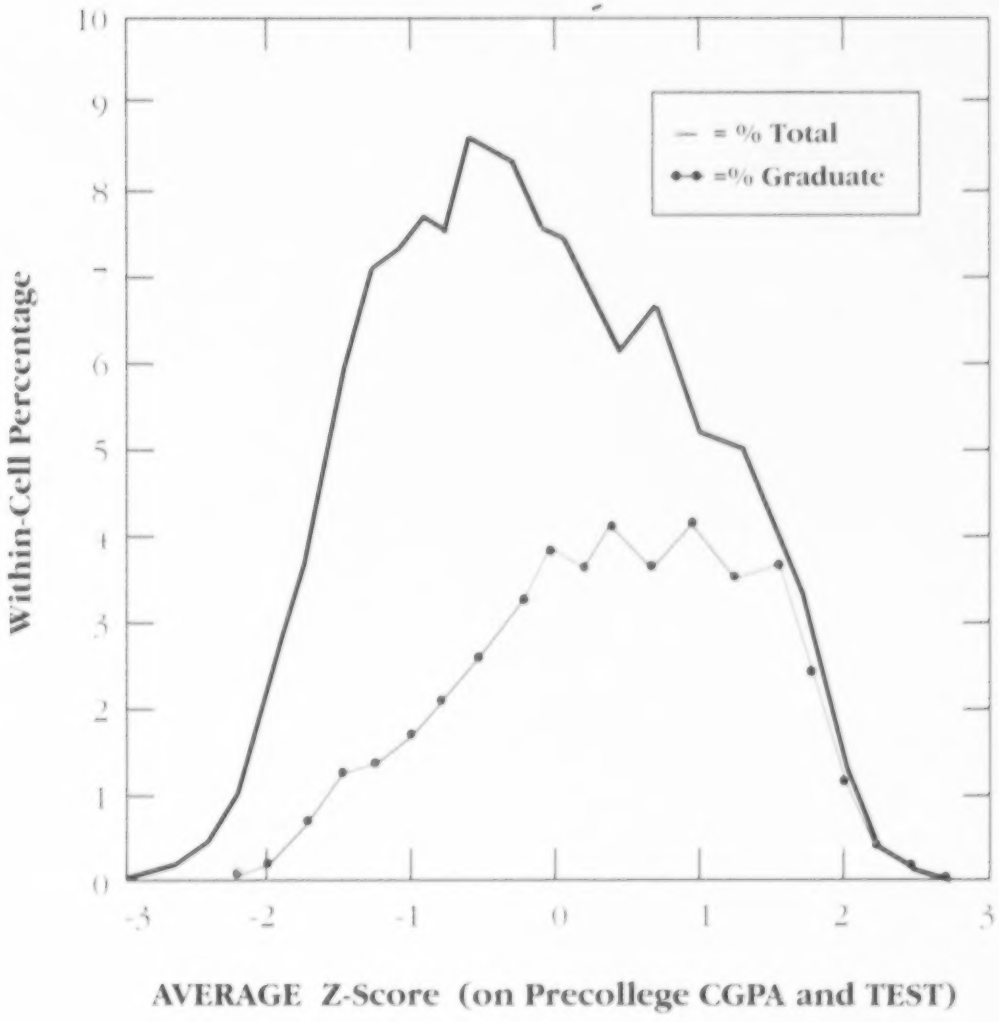


Figure 2: Within cell graduation rate as a function of average z-score for 1984 and 1985 student athletes.

Notes: (1) These numerical values are identical to those listed in the last two columns of Table 5. (2) Average z is formed as a simple average of two precollege variables—the CGPA z score and the TEST z score (either SAT or ACT in a z score form). (3) Percent total is the percentage at or below the current z value based on N=3,288 enrolled student-athletes. Percent graduate is a percentage at or below the current z value based on N=1,504 graduated student athletes.

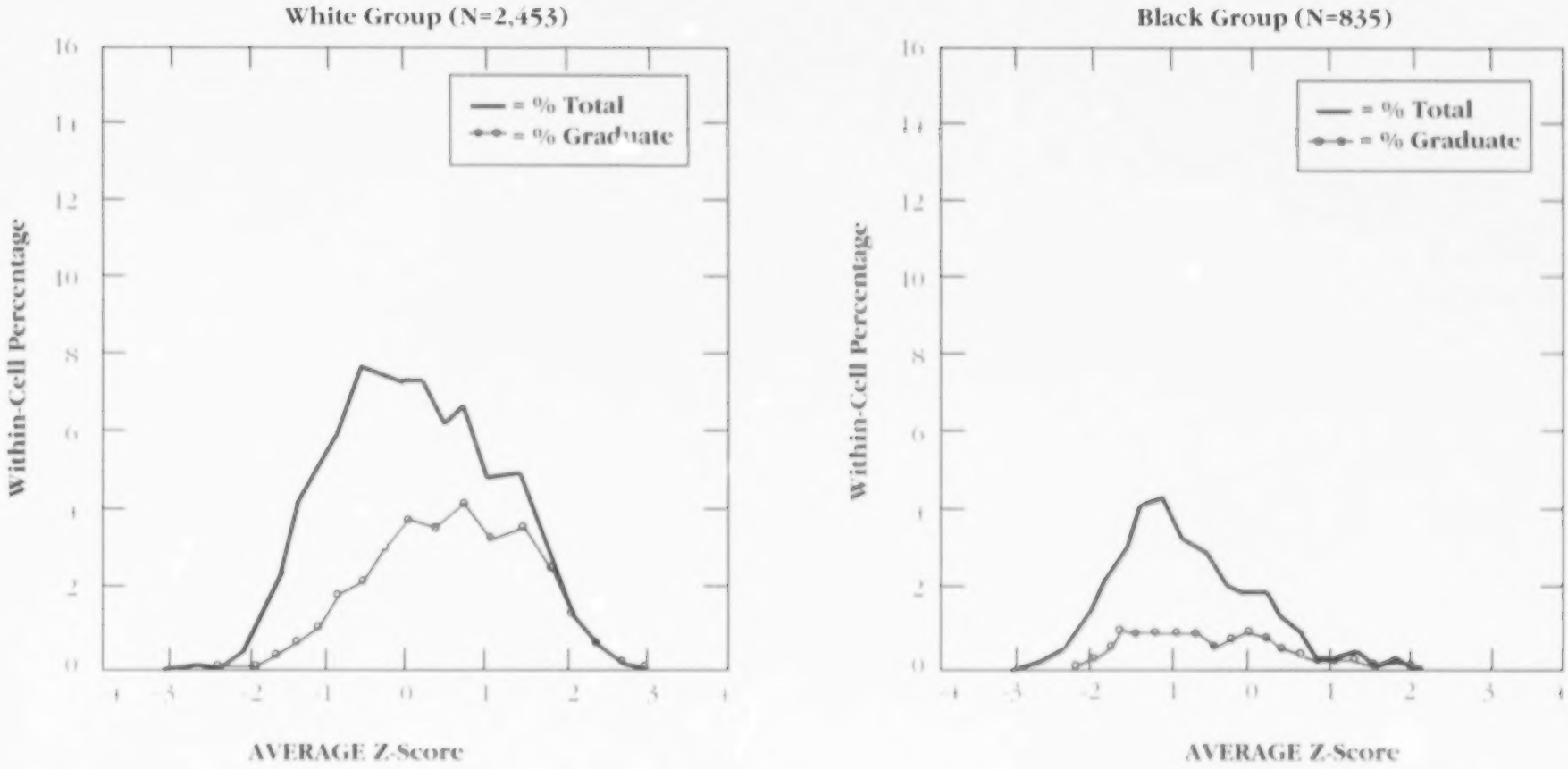
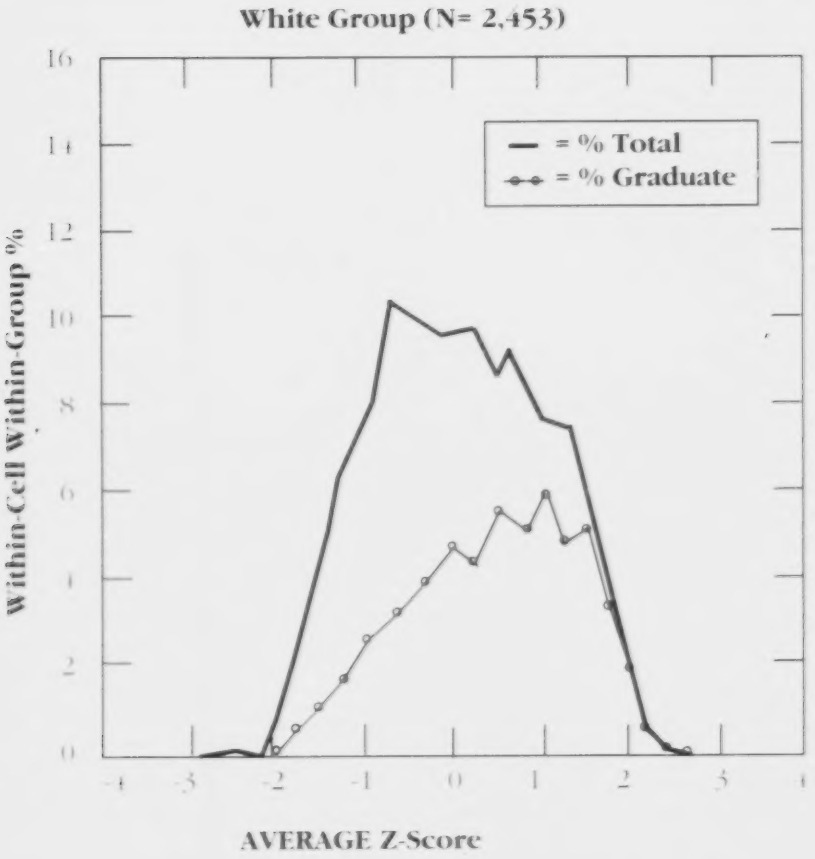


FIGURE 3

Figure 3: Within cell graduation rate as a function of average z score for 1984 and 1985 student athletes within racial groups.

Notes: (1) These numerical values are identical to those listed in Table 5a. (2) Average z is formed as a simple average of two precollege variables — the CGPA z score and the TEST z score (either SAT or ACT in a z score form). (3) Percent total is the percentage at or below the current z value based on N=3,288 enrolled student athletes. Percent graduate is a percentage at or below the current z value based on N=1,504 graduated student athletes.



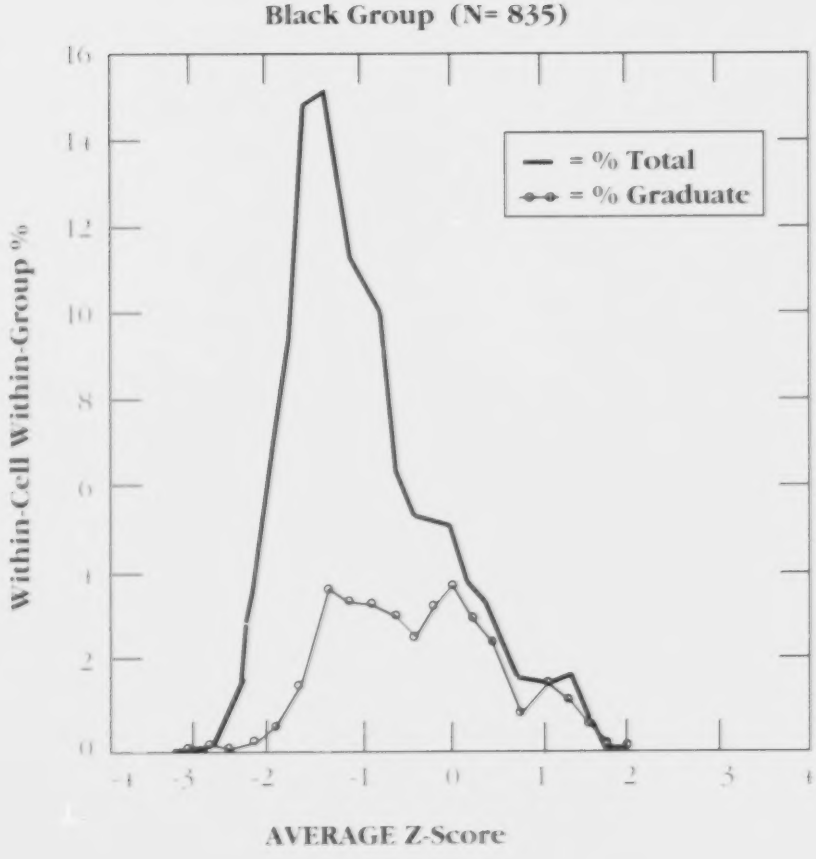


FIGURE 4

Figure 4: Within cell and within group graduation rate as a function of average z score for 1984 and 1985 student athletes within racial groups.

Notes: (1) These numerical values are identical to those listed in Table 5b. (2) Average z is formed as a simple average of two precollege variables—the CGPA z score and the TEST z score (either SAT or ACT in a z score form). (3) Percent total is the percentage at or below the current z value based on either N=2,453 (white) or N=835 (black) enrolled student athletes. Percent graduate is a percentage at or below the current z value based on N=1,282 (white) or N=222 (black) graduated student athletes.

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